

**Table 3-13a**  
**Ecological Hot Spot Screening Levels**  
**Based on High Toxicity Reference Value and Hazard Quotient of 1**  
**Upland Areas - Soil**  
**Investigation Area H1 Feasibility Study**  
**Mare Island, Vallejo, California**

COEC <sup>1</sup>	Western Meadowlark (mg/kg)	California Vole (mg/kg)	Ornate Shrew (mg/kg)	Gray Fox (mg/kg)	Northern Harrier (mg/kg)	Hot Spot Level <sup>4</sup> High TRV, HQ=1 (mg/kg)	Hot Spot Level High TRV, HQ=3 (mg/kg)	Hot Spot Level High TRV, HQ=5 (mg/kg)	Hot Spot Level High TRV, HQ=10 (mg/kg)
<b>Inorganics</b>									
Antimony	--	5184	316	1646	--	316	948	1580	3161
Arsenic <sup>3</sup>	78	1041	10	14718	115500	10	31	51	102
Cadmium <sup>3</sup>	21	585	3.2	8267	54600	3.2	9.7	16	32
Chromium <sup>3</sup>	46	5118	325	37480	3092	46	139	232	463
Cobalt	730	4431	2720	62631	89250	730	2189	3649	7298
<b>Copper<sup>2</sup></b>	670	139921	6166	148317	5454	670	2011	3351	6703
<b>Lead<sup>2</sup></b>	137	35453	3171	33098	521	137	411	685	1371
Manganese <sup>3</sup>	15725	15974	3282	497918	4074000	3282	9847	16411	32822
Mercury	7.7	886	544	12526	945	7.7	23	39	77
Molybdenum	114	4.0	354	8142	185325	4.0	12	20	40
Nickel <sup>3</sup>	2417	7001	4298	98957	295575	2417	7251	12085	24170
<b>Selenium<sup>2</sup></b>	1.5	268	1.2	17.3	5.6	1.2	3.5	5.8	12
Silver	--	831	0.32	11743	--	0.32	0.95	1.6	3.2
Thallium	--	317	194	121	--	121	363	605	1210
Vanadium <sup>3</sup>	2477	465	45	6576	598500	45	134	224	448
<b>Zinc<sup>2</sup></b>	1283	16222	2235	31731	5670	1283	3848	6413	12826
<b>Organics</b>									
<b>PCBs<sup>2</sup></b>	1.3	31	0.78	6.2	2.6	0.78	2.3	3.9	7.8
<b>DDTs<sup>2</sup></b>	0.65	5.7	8.9	1309	52	0.65	2.0	3.3	6.5
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene <sup>3</sup>	0.36	7267	2108	102715	53	0.36	1.1	1.8	3.6
Benzo(b)fluoranthene	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--	--	--	--

Notes:

-- = No TRV available for this chemical

COEC = chemical of ecological concern

HQ = hazard quotient

NA = Not available

TRV = toxicity reference value

1 - Chemicals listed in this table were identified as exhibiting at least one concentration that was considered a data outliers and/or risk drivers identified in the Baseline Ecological Risk Assessment (BERA)

2 - The chemicals identified as risk drivers from the baseline ecological risk assessment are denoted as italicized and bold.

3 - Chemicals that present potential or significant or immediate risk to Upland receptors; however, the 95% UCL concentrations of the chemicals in soil are lower than ambient concentrations.

4 - The chosen hot spot level is the the lowest concentration of the presented criteria and is presented as a shaded cell.